

## REMARKS

Claims 7-16 have been rejected under 35 USC 251 as being an improper capture of broadened claimed subject matter surrendered in the original (parent) application. This rejection is respectfully traversed.

Foremost, there is nothing wrong if the reissue claims are broader than the claims in the original application so long as the reissue application is filed within 2 years of issuance of the original application. After all, the statutory objective of 35 USC 251 is to allow reissue of defective patents and permit enlarging the scope of the claims of the original patent if the reissue application is filed within two years from the grant of the original patent.

The Examiner has explained why claims 7-16 are broader than claims 67-81 in the original application. The Examiner then states that “Applicant argued such narrowed limitations to obviate rejections in the response filed on October 10, 2000 in the original application (Paper No. 13).” See line bridging pages 2 and 3 of the Action. This statement is *totally incorrect* as the Examiner only accepted Applicant’s arguments in the response filed on October 10, 2000 with respect to claims 43-45 but continued to reject the remaining claims, including claims 67-81.

MPEP 1412.02 discusses recapture of claimed subject matter and states: “A reissue will not be granted to ‘recapture’ claimed subject matter *which was surrendered in an application to obtain the original patent.*” [Emphasis added.] The broader aspects of claims 7-16 as compared claims 67-81 of the original application do *not* relate to surrendered subject matter which was surrendered in the original application to obtain the original patent. As claims 67-81 did not issue in the original application, nothing in claims 67-81 was surrendered to obtain the allowance of claims 67-81 or the claims that actually issued from the original application.

Claims 7-16 have also been rejected under 35 USC 251 for allegedly containing new matter. This rejection is respectfully traversed.

Claims 7-12 are supported in Fig.7 and pages 49-51 (Examples 6-7) in the original application. So, claims 7-12 include no new matter.

Claims 7-16 have also been rejected as being anticipated by or, in the alternative, obvious over Shore. This rejection is respectfully traversed.

The Examiner has argued that “[i]t would be expected that the crystalline turbostratic boron [sic, boron] nitride of Shore et al. would show the diffraction peak pattern as recited in claims 7-16, since the boron nitride is crystalline as opposed to amorphous.” See Action, page 3, last line, to page 3, line 2. This argument is incorrect. Shore’s boron nitride material does *not* exhibit the diffraction peak recited in claim 7 as explained below.

Shore et al. also wrote an article entitled “Preparation of Amorphous Boron Nitride and Its Conversion to a Turbostratic, Tubular Form” in *Science* 260, pp. 659-661, 1993, which is one documents included in the IDS of May 30, 2006. In this document, Shore et al. used the term “turbostratic” on page 659, left column, lines 5-6 and explained the characteristic of X-ray powder data of “turbostratic” boron nitride on page 659, right column, lines 13-20, referring to J. Thomas et al., *J. Am. Chem. Soc.* 84, 4619 (1963), which is annexed with the IDS. Thomas et al. disclosed the diffraction pattern of “turbostratic boron nitride” in Fig. 1(A). However, Fig. 1(A) of Thomas et al. shows the diffraction pattern of “amorphous boron nitride” according to the present invention. Refer to Fig. 8 of the present application. Accordingly, the “turbostratic boron nitride” according to Shore and Thomas is in fact the “amorphous boron nitride” according to the present invention. Shore does not disclose crystalline turbostratic boron nitride. So, claims 7-12 are clearly not anticipated by Shore and are not obvious over Shore.

Claims 7-16 have also been rejected as being anticipated by or, in the alternative, obvious over Parrish or Koeda. This rejection is respectfully traversed.

The Examiner’s argument is similar to that in making the rejection over Shore, namely, that the materials of Parrish and Koeda would inherently have the recited diffraction pattern. The

Examiner's argument is not correct as the materials of Parrish and Koeda would *not* have the recited diffraction pattern as explained below.

According to Example 1 in column 6, lines 22-26, of Parrish, the boron nitride particles included 0.11 percent carbon although the particles were washed with methanol. So, the boron nitride would include impurities of carbon, which would produce its own characteristic "fingerprint" in an X-Ray diffraction pattern.

On the other hand, the crystalline turbostratic boron nitride according to the present invention does not include impurities of carbon as this fact has been verified by the X-ray diffraction pattern of Fig. 2. Therefore, it is *not* possible that the boron nitride of Parrish would inherently have the X-ray diffraction pattern as recited in applicant's claims as alleged by the Examiner in the Action on page 4, lines 6-7.

The boron nitride according to Koeda has a pillar or needle-like or filament-like crystal form. Refer to column 2, lines 30-34 and Figs. 2-7 in Koeda. On the other hand, the crystalline turbostratic boron nitride according to the present invention has a substantially spherical shape as defined in claim 8. Refer to Figs. 3, 5 and 6.

The crystal form greatly affects the property of boron nitride, such as lubrication properties and X-ray diffraction pattern. In particular, this difference in the crystal form would be seen in X-ray diffraction pattern to prove that the crystal structure of boron nitride according to Koeda is different from the crystal structure of crystalline turbostratic boron nitride according to the present invention. Therefore, it is *not* possible that the boron nitride of Koeda would inherently have the X-ray diffraction pattern as recited in applicant's claims as alleged by the Examiner in the Action on page 4, lines 6-7.

The Examiner has also argued that the Reissue Declaration is defective. The Examiner states that the Declaration merely states "original inventor" instead of "original and first inventor." The original Reissue does *not* state "original inventor" anywhere; instead it states "original and sole

inventor.” In this case, there is only one inventor, not multiple inventors, so the use of the phrase “and first” is meaningless.

The Examiner also states that the failure to file a continuation application is not a proper 35 USC 251 error as such a failure does not constitute a “word, phrase, or expression in the specification or in an original claim which would render the original patent wholly or partly inoperative or invalid.” The failure to file the continuation is not *per se* the error for filing the reissue application. The error in the original application was that the patentee claimed less than he had a right to claim in the patent, i.e., the patentee failed to obtain claims directed to a crystalline turbostratic boron nitride. This error was simply manifested by the failure to file a continuation. Therefore, the failure to file the continuation is *not* the primary basis for filing the reissue application. The patentee clearly has a right to file a reissue application for failure to claim less than what patentee had a right to claim in the patent. See 35 USC 251. Accordingly, the patentee is exercising his legal right.

In another reissue application that the undersigned has handled, the Declaration stated that the error was the following: “Claim 1 includes an additional, non-necessary step when a specific siloxane-based film is used, which is corrected by the addition of claim 12.” See Supplemental Reissue Declaration filed August 26, 1999, in U.S. Serial No. 09/112,219, now RE38,752, issued July 5, 2005. In the present application, Applicants are herewith filing a Supplemental Reissue Declaration in which they state that one error on which the reissue is based is described as follows: Claim 67 of the original application, which is directed to a crystalline turbostratic boron nitride includes an additional, non-necessary limitation that the crystalline turbostratic boron nitride is produced by any one of the methods of claims 43-48, which is corrected by the addition of claim 7. The USPTO did not raise any objection to the Supplemental Reissue Declaration of U.S. Serial No. 09/112,219 for lacking a proper 35 USC 251 error. Similarly, in the present application, Applicants believe that the Supplemental Reissue Declaration should overcome the objections of the Examiner.

In the unlikely event that the transmittal form is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. § 1.17 (p)) is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petition and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 251002008830.

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Respectfully submitted,

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